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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/513,489	02/25/2000	Aravind Sitaraman	CISCO-1818	7304

7590

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EXAMINER
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AVELLINO, JOSEPH E

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 03/26/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/513,489

Applicant(s)

SITARAMAN ET AL.

Examiner

Joseph E. Avellino

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-29 and 45-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29, 45-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

**DETAILED ACTION**

1. Claims 1-29, and 45-49 are pending in this examination.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 26, 28, 45, 46, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holt et al. (USPN 6,070,192) (hereinafter Holt) in view of Voit et al. (USPN 6,215,790) (hereinafter Voit).

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5. Referring to claims 1, 21, 26, and 45 Holt discloses a network access server (NAS) providing a connection to a user in a data communications network, said NAS capable of communicating with a home gateway server (HGS) maintaining a pool of IP addresses for allocation to authorized users associated with the NAS, said NAS comprising:

an authenticator for asking the HGS for an IP address on behalf of the user by using a tunneling protocol. (col. 11, lines 30-65),

Holt does not disclose asking for an IP address without the use of a tunnel. However Voit discloses asking the HGS (domain name server) for an IP address without the use of a tunnel (col. 28, lines 35-40). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Holt with Voit to efficiently utilize the routing capabilities of gateways (NAS's) as supported in Voit (col. 4, lines 17-21).

Holt in view of Voit do not specifically disclose that the NAS also comprises memory locations associated with each other to store an identifier and an IP address of a user. "Official Notice" is taken that both the concept and advantages of providing for memory locations of a network access server associated with one other to store an identifier and an IP address of users that are connected is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include memory locations to store an identifier and an associated IP address to the combined system of Holt and Voit because it would allow the network access server to efficiently keep track of which users are presently connected to the network via the server.

6. Referring to claims 3, 23, 28 and 47, Holt discloses a receiver for receiving periodic queries from the Network Controller (NC) about the status of the user connection to the NAS (col. 12, line 64 to col. 13, line 14); and

a responder responsive to said periodic queries for informing the NC that the user is still connected to the NAS (col. 12, line 64 to col. 13, line 14).

Holt does not disclose informing the HGS that the user is still connected, however the system of Holt could be obviously modified to incorporate the NC as part of the HGS, therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Holt to reduce the overall complexity of the system and reducing overall network traffic.

7. Referring to claims 5, 7, and 49, Holt discloses an HGS identifier responsive to login information provided by the user for identifying an HGS to which to forward the user's request for an IP address (col. 11, lines 23-26).

8. Referring to claims 9 and 11, Holt discloses an HGS identifier responsive to call information associated with the incoming line used by the user to access the NAS for identifying an HGS to which to forward the user's request for an IP address (col. 11, lines 1-7).

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9. Referring to claims 13 and 15, Holt discloses a generator, responsive to the receipt of a disconnection request from the user, for generating and sending a notice to the HGS that the user is no longer connected to the NAS (col. 11, line 66 to col. 12, line 9).

10. Referring to claims 17 and 19, Holt discloses a relay responsive to the IP address for the user received from the HGS for informing the user of its IP address (col. 11, lines 30-65).

11. Claims 46 and 48 are rejected for similar reasons as stated above.

Claims 4, 8, 12, 16, 20, 24, 25, 29, and 48, are rejected under 35 U.S.C. 103(a) as being unpatentable over Holt in view of Voit in view of Inoue et al. (USPN 6,442,616) (hereinafter Inoue).

12. Referring to claims 4, 24, and 48 Holt in view of Voit discloses a Network Access Server (NAS) as stated in the claims above. Holt in view of Voit does not disclose the NAS comprising a receiver for receiving periodic signals from the user and a forwarder responsive to said receiver for forwarding information to the HGS that the user is still connected to the NAS. Inoue discloses:

a receiver for receiving periodic signals from the user (col. 15, lines 21-24); and

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a forwarder (home router) responsive to said receiver for forwarding information to the HGS that the user is still connected to the NAS (col. 15, lines 25-26).

It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Holt and Voit with Inoue to efficiently monitor the connections in the network while reducing the complexity of the monitoring components.

13. Referring to claim 8, Holt discloses an HGS identifier responsive to login information provided by the user for identifying an HGS to which to forward the user's request for an IP address (col. 11, lines 23-26).

14. Referring to claim 12, Holt discloses an HGS identifier responsive to call information associated with the incoming line used by the user to access the NAS for identifying an HGS to which to forward the user's request for an IP address (col. 11, lines 1-7).

15. Referring to claim 16, Holt discloses a generator, responsive to the receipt of a disconnection request from the user, for generating and sending a notice to the HGS that the user is no longer connected to the NAS (col. 11, line 66 to col. 12, line 9).

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16. Referring to claim 20, Holt discloses a relay responsive to the IP address for the user received from the HGS for informing the user of its IP address (col. 11, lines 30-65).

17. Referring to claim 25, Holt discloses identifying an HGS to which to forward the user's request for an IP address, said identifying in response to call information associated with an incoming line used by the user (col. 11, lines 1-7).

18. Claim 29 is rejected for similar reasons as stated above.

Claims 2, 6, 10, 14, 18, 22, 27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Holt in view of Voit in view of Inoue in view of Reid (USPN 6,233,616).

19. Referring to claim 2, 22, and 27, Holt in view of Voit in view of Inoue disclose a Network Access Server (NAS) as stated in the claims above. Inoue further discloses a detector for periodically detecting connection of the user to the NAS (col. 15, lines 21-24), however Holt in view of Voit in view of Inoue do not disclose the NAS comprising a keep-alive sender for periodically informing the HGS that the user is still connected to the NAS. Reid discloses periodically informing the HGS that the user is still connected to the NAS (DHCP server) (col. 4, lines 42-43). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of



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Reid with Holt, Voit, and Inoue to efficiently monitor the connections in the network while reducing the complexity of the monitoring components.

20. Referring to claim 6, Holt discloses an HGS identifier responsive to login information provided by the user for identifying an HGS to which to forward the user's request for an IP address (col. 11, lines 23-26).

21. Referring to claim 10, Holt discloses an HGS identifier responsive to call information associated with the incoming line used by the user to access the NAS for identifying an HGS to which to forward the user's request for an IP address (col. 11, lines 1-7).

22. Referring to claim 14, Holt discloses a generator, responsive to the receipt of a disconnection request from the user, for generating and sending a notice to the HGS that the user is no longer connected to the NAS (col. 11, line 66 to col. 12, line 9).

23. Referring to claim 18, Holt discloses a relay responsive to the IP address for the user received from the HGS for informing the user of its IP address (col. 11, lines 30-65).

***Response to Amendment***

24. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 30-34 been renumbered 45-49 respectively.

25. The Office has considered the amendments to the abstract. The objection to the specification in regards to the abstract is withdrawn.

26. The Office has considered the amendments to claim 3. The objection to the specification in regards to minor informalities in the claims is withdrawn.

27. Applicant's arguments filed March 19, 2003 have been fully considered but they are not persuasive.

28. In the remarks, Applicant's argued in substance that, (1) the Holt reference does not teach asking the HGS for an IP address on behalf of the user without the use of a tunneling protocol.

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29. As to point (1), as necessitated by amendment, the Office has modified its rejection to meet the limitations of the independent claims.

30. Since Applicant has not timely and seasonably traverse the Official Notice given in the previous Office Action, it is considered to be Admitted Prior Art. See MPEP 2144.03.

### ***Conclusion***

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

32. Gentry (USPN 6,453,162) discloses subscriber provisioning of wireless services.

33. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (703) 305-7855. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (703) 308-5221. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

JEA  
March 20, 2003



DAVID WILEY  
SUPERVISORY PATENT EXAMINER  
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